

BEFORE THE ARIZONA CORPORATION CONTINUESIONE D

WILLIAM MUNDELL Chairman

JAMES M. IRVIN Commissioner

MARC SPITZER Commissioner

DISCOUNTS.

Arizona Corporation Commission

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AZ CORP COMMISSION DOCUMENT CONTROL

IN THE MATTER OF THE GENERIC INVESTIGATION INTO U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH CERTAIN WHOLESALE PRICING REQUIREMENTS FOR UNBUNDLED NETWORK ELEMENTS AND RESALE

DOCKET NO. T-00000A-00-0194

QWEST CORPORATION'S REPLY TO AT&T'S OPPOSITION TO QWEST'S REQUEST FOR EXPEDITED CLARIFICATION OF MAY 9 PROCEDURAL ORDER

Qwest Corporation ("Qwest") files its Reply to AT&T's Opposition to Qwest's Motion seeking an expedited clarification of the Arizona Corporation Commission's ("the Commission") May 9, 2002 Procedural Order issued in the above-referenced proceeding, and hereby requests oral argument on its Motion.

AT&T's contentions notwithstanding, Qwest's Motion does not seek to re-litigate in this forum any aspect of the Commission's final order in this proceeding. Qwest respectfully submits, however, that with regard to a key aspect of a major Commission procedural directive in this proceeding – party access to documentation underlying the Commission-ordered location data processing – there is a clear misunderstanding between the parties regarding the Commission's intent.

A brief review of the essential facts is necessary. During its April 11, 2002 Open Meeting, the Commission directed that the record be reopened in order to put into evidence 2000 customer location and line count by location data to establish the cost of the unbundled

loops. The Commission admonished the parties to work quickly and cooperatively to ensure that all applicable timelines were met. The Hearing Division issued a Procedural Order on May 9, 2002, requiring Qwest and AT&T/WorldCom to provide TNS with year 2000 customer location data and for TNS to process that data in the same manner that it processed the 1997 customer location data used in the initial AT&T/WorldCom run of the HAI model in this docket. The Procedural Order further required the parties to run the HAI model with the new TNS data and to provide a joint rate schedule based on that run by May 24, 2002. The Procedural Order required that Qwest pay one-half of TNS' data processing costs. Set forth below is a timeline of several discussions between Qwest and TNS regarding data production procedures to comply with the Commission's order, and facilitating Qwest's access to underlying information that would allow it to evaluate TNS' work product:

- On May 10, 2002, immediately after the issuance of this Procedural Order, Qwest wrote to TNS requesting that TNS provide specified information to Qwest that would permit Qwest to evaluate the data produced by TNS for use in the HAI model. (See Qwest Corporation's Request for Expedited Clarification of May 9 Procedural Order, Exhibit A.)
- On May 14, TNS responded to Qwest's letter, stating that in light of the ALJ's Order, it would give highest priority until May 24<sup>th</sup> "to the completion of customer location input data." TNS also agreed it would "work to enable Qwest to have a thorough understanding of the data, and the processes to create it, after it has been created..." and specifically provide Qwest with information regarding the "numerous data processing procedures in various computer languages" utilized by TNS in its activities in this proceeding. TNS further expressed that "when time allows [Qwest and TNS] will be able to work through these issues in the most productive way possible." (Qwest Reply, Exhibit 1.)
- On May 15<sup>th</sup>, Qwest sent to TNS a detailed set of questions concerning the "clustering" process, prioritized so as to not interfere with process completion dates. (Exhibit 2.)
- Also on May 15<sup>th</sup>, the parties held a conference call to agree upon timelines and activities related to ensuring compliance with the Commission's May 24<sup>th</sup> filing date for the joint rate schedule. On the May 15<sup>th</sup> call, Mr. Landis of TNS specifically

agreed to provide the materials Owest requested in its e-mail.

- Meeting notes for the conference call were distributed by Qwest on May 16 (Exhibit 3). The meeting notes stated that TNS would:
  - 1. "[P]rovide written documentation of their geo-coding, surrogating, and clustering processes in approximately one week flowing the completion of the HAI cluster input files. After review, TNS will provide documentation as requested to fill in any gaps that may exist."
  - 2. "[R]espond to a written list of questions concerning the clustering process submitted to them by Qwest on 5/15. The questions are prioritized so as to not interfere with the completion date of the process."

To avoid confusion, Qwest requested specifically that any party respond "if there are any items that [Qwest] neglected to include or that you recall differently."

- On May 17<sup>th</sup>, TNS responded to the parties that "[b]ecause of the tight schedule for this project, [TNS has] not yet been able to respond to the Cluster questions or the meeting summary. [TNS] will get to this as soon as the process is in place and running." (Exhibit 4).
- On June 17<sup>th</sup>, after completion of the joint run schedule filing, counsel for Qwest sent TNS a letter reiterating Qwest's request for "written documentation [from TNS] of the processes used to compile the data." (See Qwest Corporation's Request for Expedited Clarification of May 9 Procedural Order, Exhibit A.)
- On June 21<sup>st</sup>, TNS responded to Qwest's request for detailed underlying documentation with a two-page letter that provided general, definitional description of the clustering process, without any underlying documentation of TNS' processes. (See Qwest Corporation's Request for Expedited Clarification of May 9 Procedural Order, Exhibit B.)
- On September 4<sup>th</sup>, in response to a TNS invoice sent to Qwest's outside counsel, Qwest's counsel again requested that TNS provide its written documentation for the data coding process. Qwest explained that "because TNS has not produced these materials, Qwest cannot properly evaluate what TNS did with the customer location data. The materials are an important component of the work Qwest is being asked to pay for, and Qwest should not have to pay TNS' invoice until it has this work product in hand." Despite TNS' failure to produce any of the agreed-upon materials, Qwest provided a partial (\$5,000) payment of the TNS invoice. (See Qwest Corporation's Request for Expedited Clarification of May 9 Procedural Order, Exhibit A.)
- On September 27<sup>th</sup>, TNS responded that while it would provide Qwest with "high–level documentation" of its processes, TNS would not provide any additional information, not would it "review previous Qwest questions in written form,"

without Qwest's payment of the balance of TNS' invoice and Qwest's initiation of a "separate engagement" with TNS to provide this additional information. (See Qwest Corporation's Request for Expedited Clarification of May 9 Procedural Order, Exhibit B.)

To this date, TNS has not provided Qwest with the documentation necessary to analyze and understand the work TNS performed to incorporate the 2000 Arizona customer location data into the HAI model.

As the above timeline and supporting exhibits clearly indicate, Qwest in good faith attempted to work cooperatively with TNS and parties and to comply with the directives of the Commission's May 9, 2002 Procedural Order. Qwest believes that the Procedural Order did not contemplate that Qwest or any other party pay for the work done by TNS to incorporate the 2000 Arizona customer location data into the HAI model by TNS without being provided access to the underlying information and documentation that supports it. This conclusion – proffered by AT&T in its Opposition -- simply is wholly inconsistent normal vendor relationships. More importantly, it is clear from TNS' varying responses throughout this process that it refuses to provide the requested information, if it exists.

Given these circumstances, Qwest submits that an expedited clarification of the Commission's May 9<sup>th</sup> 2002 Order requiring TNS to produce the underlying data behind its 2000 customer location run is essential. Qwest believes that absent TNS providing such

information, Qwest should be released from any obligation to make additional payment to

TNS of the balance of its processing costs.

DATED this 22<sup>nd</sup> day of November, 2002.

QWEST CORPORATION
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-and-

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Attorneys for Qwest Corporation

ORIGINAL and 13 copies of the foregoing hand-delivered for filing this day of November, 2002 to:

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COPY of the foregoing mailed this day of November, 2002 to:

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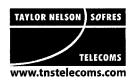
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May 14, 2002

Mr. Gary Fleming, Senior Director Qwest 1801 California St. 47<sup>th</sup> Fl Denver, CO 80202

Re: Response to QWEST Letter to TNS Telecoms - May 13th

Dear Mr. Fleming:

Thank you for your letter yesterday detailing Qwest's request for information regarding the creation of custom HAI data based on the Qwest Arizona customer location data. I am writing to respond to that request on behalf of TNS Telecoms.

It is the goal of TNS Telecoms to make any and all reasonable efforts to assure that Qwest, the Arizona Commission and AT&T/Worldcom have the most complete understanding of the procedures TNS Telecoms is utilizing to create the HAI input data. However, as discussed in our May 13<sup>th</sup> conversation, some of Qwest's current requests have the potential to hinder our ability to meet the current timeframe for completion of the input data by shifting our focus away from the data creation. Given the order of the ALJ in this proceeding it is TNS Telecoms position that the completion of the customer location input data is our highest priority in this matter.

It should be noted that in all previous proceedings in working with AT&T and Worldcom we have never produced the detailed documentation or any of the intermediate data currently requested by Qwest. Thus, our intention in this situation was and is to certainly include Qwest on any and all distributions of documentation or work products, but typically that distribution occurs only at the conclusion of the data production and not during the process. Realizing that this is a special case, as Qwest has supplied their own customer location files, we will certainly agree to provide intermediate output at each of the following four natural breaking points in the process:

- 1. Geocoded Customer Location Data (with appropriate longitude and latitude)
  - a. To be released later today along with other summary data for validation
- 2. Customer Location Data with road surrogate points
  - a. Estimated release: May 20<sup>th</sup>
- 3. Cluster output files
  - a. Estimated release: May 22<sup>nd</sup>

- 4. Cluster data files (to be used to run the HAI model)
  - a. Estimated Release: May 23<sup>rd</sup>

Given the nature of the above processes, the estimated release dates should only be considered guidelines and not a firm timetable. These four data releases should be sufficient in meeting all of Qwest's requests for intermediate data elements made in the May 13<sup>th</sup> letter.

Regarding the requests for both documentation and "logic" surrounding various processes within the data creation, we will certainly work to enable Qwest to have a thorough understanding of the data, and the processes to create it, after it has been created. However, as noted earlier, much of the requested information is not currently available without preparation. Further, in the case of "algorithms" and "logic" we are in need of more detailed conversations reviewing Qwest's specific needs, as no specific "algorithms" are used in the process, but rather numerous data processing procedures in various computing languages. I have no doubt that when time allows we will be able to work through these issues in the most productive way possible, but that time will not be available until after the data has first been created.

As to TNS Telecoms releasing intermediate runs of the HAI mode itself, TNS Telecoms provides only expertise and services in creating customer location data. Therefore, TNS Telecoms does not engage in running the HAI model in any capacity and thus, we will not be releasing model outputs in this proceeding.

Lastly, while we will make all efforts to finish the data creation as soon as possible, we are not able to commit to May 21<sup>st</sup> as date of the data's release. Per my previous affidavit in this proceeding TNS Telecoms cannot commit to having the data finished before May 24<sup>th</sup>.

Please feel free to call me with any questions or if you would prefer to arrange a conference call among the interested parties.

Cordially,

Charles A. White Vice President Marketing and Business Development

## **Clustering Questions for Qwest/TNS Conference Call**

### Raster Generation

1. What is the origin of the raster? ... the location of the CO?

### Clustering

- 1. Is the 2-mile nearest neighbor rule adjusted by 300-ft like the 18,000-ft distance constrant is?
- 2. How does the algorithm pick the initial cell for the clustering process?
- 3. As the search radius is continually enlarged, does it remain centered on the centroid of the initial cell?
- 4. What is considered the center of the cluster as it growing? The center of the cluster being the point that is measured to when testing a potential cell against the 18,000-ft distance constraint.
- 5. Why are immediate neighbors considered in conjunction with a cell that falls within the search radius?
- 6. If one or more of the cells of a group being considered for clustering cannot be added to the cluster, can any of the other valid cells of that group be added to that cluster? ... either immediately, or when considered in conjunction with another cell group?
- 7. Are there any other clustering restrictions we should be aware of?

### Cluster Areas

- 1. How is the area of the cluster determined?
- 2. How is the aspect ratio of the cluster determined?
- 3. What is ultimately used as the centroid of the cluster?

### Chaining

1. Say outlier 1 is 4 distance units from main cluster A, and outlier 2 is 2 units from outlier 1 and 5 units from main cluster B, is outlier 2 chained to outlier 1, which is chained to main cluster A?

### Additional

1. Any reason why cluster centroids are converted to V&H?

- 2. The documentation says cluster dimensions are adjusted to be at least twice the default drop length for the cluster's density range:
  - a. How is density determined for clusters whose convex hull has no area?
  - b. If the height and/or width of a cluster is adjusted, is area, aspect ratio, and density recalculated?
  - c. If recalculated, what is done if the new density for the cluster falls in a different density range?
- 3. What is the line density that is reported in the output table? ... why doesn't it equal the total lines divided by the area reported for the cluster?
- 4. Where are right angle distance measurements between main clusters and CO, and outliers and main clusters reported in the output table?
- 5. Are terrain attribute assigned to clusters based on the CBG the cluster centroid falls within?

### **Output Fields**

- 1. Overall\_Quad, \_Omega, etc., for an outlier contains the values for the main cluster of that outlier?
- 2. Outlier\_Quad, \_Omega, etc., are calculated relative to the immediate parent cluster of the outlier, which may be another outlier?
- 3. Are the line counts, households, units, etc., that are reported for a cluster just for that cluster, or does it include the counts for outliers that are chained to it?
- 4. What is the definition of output fields:
  - a. FRACWCLINES? Is it reported for all clusters?
  - b. AVGLOOPDIST? Radial or rectangular distances? Units?
  - c. TOTOUTLINE? Why doesn't sum of total lines for the outliers of a main cluster not equal what is reported?
  - d. TOTAL\_STRAND\_DIST? Rectangular MST? Is cluster centroid included? Units?

Pęter Copeland 05/16/2002 04:14 PM

To: CWhite@tnstelecoms.com, ddenney@att.com, Kevin\_Landis/TNS@tnspa.com, Lieberma@lga.att.com, bbasarich@stopwatchmaps.com, mark.t.bryant@wcom.com, pbolian@stopwatchmaps.com, gxmurph@qwest.com

cc: NCutler@perkinscoie.com

Subject: 5/15 Conference Call Notes

I took the following notes of our conference call yesterday. Let me know if there are any items that I neglected to include or that you recall differently.

5/15/02 TNS Conference Call

Attendees:
Chuck White ? TNS
Kevin Landis ? TNS
Doug Denney ? AT&T
Mark Bryant ? Worldcom
Peter Copeland ? Qwest
Geoff Murphy ? Qwest
Phil Bolian ? Stopwatch Maps
Brian Basarich ? Stopwatch Maps

Timelines & Activities
TNS stated that 5/23 deadline for producing the cluster data input file for
HAI is aggressive, but that if there are no major problems, they should be
able to beat that date. When the HAI input file is complete, TNS will

email the file to AT&T and Qwest to run in the HAI model.

When a preliminary or draft HAI input file is produced, TNS will email that file to AT&T and Qwest, in order to perform test runs of the HAI model prior to receiving the final HAI cluster input file.

Qwest provided an updated wire center boundary file for the AZ wire centers that reflect changes to the FTMDAZNO and FTMDAZMA boundaries. The boundaries were emailed to TNS on 5/15/02.

TNS provided a file with the Qwest customer locations with the TNS geo-coded location for review on a TNS FTP site on 5/15/02.

TNS will provide written documentation of their geo-coding, surrogating, and clustering processes in approximately one week following the completion of the HAI cluster input files. After review, TNS will provide additional documentation as requested to fill in any gaps that may exist.

TNS will respond to a written list of questions concerning the clustering process submitted to them by Qwest on 5/15. The questions are prioritized so as to not interfere with the completion date of the process.

### Other Items

Doug Denney is investigating the model's use of housing unit data to determine if using Qwest residence accounts by address can be used for determining multi-unit housing counts by cluster and assessing and also investigating the handling of coin lines in HAI.

Employee counts by cluster used in the HAI input file will be generated based on the statewide relationship of employees to business lines in the originally filed HAI 5.2a.

TNS will use its "Point Code" process for associating special access lines with individual clusters.

Peter Copeland is investigating the customer location line counts versus the line counts utilized by HAI and the addition of surrogate customer points to account for the additional residence and business lines included in HAI.

### KLandis@tnstelecoms.com on 05/17/2002 07:26:03 AM

To: "Peter Copeland" <pcopela@qwest.com>, Geoffrey Murphy <pxmurph@qwest.com>, Byron Watson <bxwatso@qwest.com>, ddenney@att.com, Lieberma@lga.att.com, bbasarich@stopwatchmaps.com, mark.t.bryant@wcom.com, pbolian@stopwatchmaps.com

cc: Charles White/TNS@tnspa.com

Subject: Re: Geocode results available

All,

Because of the tight schedule for this project, I have not yet been able to respond to the Cluster questions or the meeting summary. I will get to this as soon as the process is in place and running.

I have come across another problem with the customer data. There are 747 records where number of residential lines is a negative number. Should this be occurring and what does this mean?

Thanks.

--Kevin

Kevin G. Landis Senior Vice President Information Technology TNS Telecoms (267) 287-0128